
References

- Aarons, J., L. Berg, F. Hoffman, G. Howard, R. Bainer, E. Folsom, M. Dresen (1998), *LLNL Ground Water Project 1998 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126020-98).
- Althouse, P. E. (1998), *Radiological Background Levels Found in Glass Fiber Filters Used for Low-Level Environmental Surveillance Air Sampling*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-JC-131844).
- Bainer, R. W., and L. L. Berg, eds. (1998), Action Memorandum for an Emergency Removal Action at the National Ignition Facility Construction Site, Lawrence Livermore National Laboratory, Livermore Site, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-128728).
- Bainer, R. W., and J. Littlejohn (1998a), Letter Report: LLNL Livermore Site March 24, 1998 Remedial Program Managers' Meeting Summary and First Quarter Self-Monitoring Report, dated May 29, 1998.
- Bainer, R. W., and J. Littlejohn (1998b), Letter Report: LLNL Livermore Site Second Quarter Self-Monitoring Report, dated August 28, 1998.
- Bainer, R. W., and J. Littlejohn (1998c), Letter Report: LLNL Livermore Site Third Quarter Self-Monitoring Report, dated November 30, 1998.
- Bainer, R. W., and J. Littlejohn (1999), Letter Report: LLNL Livermore Site Fourth Quarter Self-Monitoring Report, Lawrence Livermore National Laboratory, Livermore, CA, dated February 28, 1999.
- Berg, L. L., E. N. Folsom, M. D. Dresen, R. W. Bainer, and A. L. Lamarre, eds. (1997a), *Explanation of Significant Differences for Metals Discharge Limits at the Lawrence Livermore National Laboratory Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125927).
- Berg, L. L., E. N. Folsom, M. D. Dresen, R. W. Bainer, and A. L. Lamarre, eds. (1997b), *Explanation of Significant Differences for Treatment Facilities A and B, Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125555).

References

- Berg, L. L., M. D. Dresen, R. W. Bainer, E. N. Folsom, and A. L. Lamarre, eds. (1998), *Remedial Design Report No. 4 for the Trailer 5475 Treatment Facilities, Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126014).
- Biermann, A. H., G. M. Gallegos, R. J. Harrach, N. A. Bertoldo, L. C. Hall, R. L. Berger, and K. A. Surano (1999), *LLNL NESHAPs 1998 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-99).
- Biermann, A. H., R. J. Harrach, R. L. Berger, and K. A. Surano (1993), *LLNL NESHAPs Project Quarterly Progress Report, First Quarter 1993*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-108419-93-1).
- Blake, R. G., C. M. Noyes, and M. P. Maley (1995), *Hydrostratigraphic Analysis—The Key to Cost-Effective Ground Water Cleanup at Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-JC-120614).
- Brandstetter, E. R. (1998), *Livermore Site Annual Storm Water Monitoring Report for WDR 95-174*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126783-98).
- Brown, R., and S. Mathews (1998), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, Second Quarter 1998*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-98-2).
- Brown, R., R. Ward, and S. Mathews (1998), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, Third Quarter 1998*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-98-3).
- Brown, R. A., S. Mathews, and R. Ward (1999), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, Annual/Fourth Quarter Report 1998*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-98-4).
- Campbell, B. (1995), *Spill Prevention Control and Countermeasure (SPCC) Plan, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-105699 Rev 1).
- Cantwell, B. and J. Celeste (1998), *National Ignition Facility Pollution Prevention and Waste Minimization Plan*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-131194).

References

- Carlsen, T. M. (1991a), *LLNL Site 300 Environmental Investigations Quarterly, January–March 1991*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10194-91-1).
- Carlsen, T. M. (1991b), *LLNL Site 300 Environmental Investigations Quarterly, April–June 1991*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10194-91-2).
- Carlsen, T. M., E. Bissell, and B. Pavlik (1998), *Restoration of the Large-Flowered Fiddleneck (Amsinckia grandiflora) at Lawrence Livermore National Laboratory Site 300 Project Progress Report Fiscal Year 1998 October 1997–September 1998*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-131846).
- Carpenter, D. W., J. J. Sweeney, P. W. Kasameyer, N. R. Burkhard, K. G. Knauss, and R. J. Shelmon (1984), *Geology of the Lawrence Livermore National Laboratory Site and Adjacent Areas*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-53316).
- Celeste, J. (1997), *FY97 Pollution Prevention Plan: A Strategy for the Future*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-127073).
- Celeste, J., S. Coleman, B. Nisbet, and B. Campbell (1998), *A Comprehensive Opportunity Assessment for Pollution Prevention at Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-127890).
- Central Valley Regional Water Quality Control Board (1993), *Order No. 93-100, Waste Discharge Requirements for University of California Lawrence Livermore National Laboratory Site 300 and U.S. Department of Energy, Landfill Pits 1 and 7, San Joaquin County* (June 25, 1993).
- Central Valley Regional Water Quality Control Board (1998), *Revised Monitoring and Reporting Programs No. 93-100 and 96-248, Lawrence Livermore National Laboratory Site 300 and U.S. Department of Energy, Landfill Pits 1 and 7, San Joaquin County* (June 25, 1993).
- Christofferson, E. (1998a), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, Second Quarter Report, April–June 1998* (UCRL-AR-132057-98-2).

References

- Christofferson, E. (1998b), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, Third Quarter Report, July–September 1998* (UCRL-AR-132057-98-3).
- Christofferson, E. and D. H. MacQueen (1998a), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, First Quarter Report, January–March, 1998* (UCAR-10191-98-1).
- Christofferson, E. and D. H. MacQueen (1998b), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, Second Quarter Report, April–June, 1998* (UCAR-10191-98-2).
- Christofferson, E. and D. H. MacQueen (1998c), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, Third Quarter Report, July–September, 1998* (UCAR-10191-98-3).
- Christofferson, E. and D. H. MacQueen (1999), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, Annual Report for 1998* (UCAR-10191-98-4).
- Christofferson, E. and M. J. Taffet (1999), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, Annual Report for 1998* (UCRL-AR-132057-98-4).
- Ciba-Geigy Ltd. (1981). “Units of Measurement, Body Fluids, Composition of the Body, Nutrition.” In *Geigy Scientific Tables*, Vol. 1, Eighth Edition, Basel, Switzerland.
- Cooperrider, A. Y., B. J. Boyd, and H. R. Stuart, eds. (1986), *Inventory and Monitoring of Wildlife Habitat*, U. S. Department of Interior, Bureau of Land Management, Service Center, Denver, CO.
- Demir, Z., R. J. Gelinas, P. F. McKereghan, and T. J. Vogele (1997), *Preliminary 3-D Simulations of Contaminant Migration in Ground Water Beneath LLNL Livermore Site: Second Interim Report—The TFB Area*, Lawrence Livermore National Laboratory, Livermore, CA (ERD/LS/3DIR:2).
- Dibblee, T. W., Jr. (1980), *Preliminary Geologic Map of the Midway Quadrangle, Alameda and San Joaquin Counties, California*, USGS Open File Report 80-535.

References

- Dibley, V., and R. Depue (1998), *LLNL Livermore Site and Site 300 Environmental Restoration Project Standard Operating Procedures (SOPs)*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-109115 Rev. 4).
- Diersch, H. J. G. (1998), "Graphics-Based, Interactive Finite-Element Simulation System for Modeling Ground Water Flow, Contaminant Mass and Heat Transport Processes (FEFLOW)." In *WASY Institute for Water Resources Planning and System Research Ltd.*, Berlin, Germany.
- Dresen, M. D., J. P. Ziagos, A. J. Boegel, E. M. Nichols, K. Anderson, R. O. Devany, E. N. Folsom, J. L. Iovenitti, J. K. McDonald, P. F. McKereghan, and C. N. Noyes (1993), *Remedial Action Implementation Plan for the LLNL Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-110532) (page 43 revised September 2, 1993; Table 5 revised June 1998).
- Eadie, G. G. and D. E. Bernhardt (1976), *Sampling and Data Reporting Considerations for Airborne Particulate Radioactivity*, U.S. Environmental Protection Agency, Office of Radiation Programs, Las Vegas, Nevada (ORP/LV-76-9).
- Eccher, B., K. Folks, R. Goluba, M. Gonzalez, D. Hieb, W. Isherwood, M. Kelly, S. Mathews, V. Mode, B. Schumacher, T. Schmiegel, and S. Thomson (1994a), *Storm Water Pollution Prevention Plan (SWPPP) Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-110573-94).
- Eccher, B., K. Folks, R. Goluba, M. Gonzalez, D. Hieb, W. Isherwood, M. Kelly, S. Mathews, V. Mode, B. Schumacher, T. Schmiegel, and S. Thomson (1994b), *Storm Water Pollution Prevention Plan (SWPPP), Experimental Test Site (Site 300)*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-110572-94).
- Eckerman, K. F., A. B. Wolbarst, and A. C. B. Richardson (1988), *Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion*, U.S. Environmental Protection Agency, Washington, DC (Federal Guidance Report No. 11, EPA-520/1-88-020).
- Eckerman, K. F., and J. C. Ryman (1993), *External Exposure to Radionuclides in Air, Water and Soil*, U.S. Environmental Protection Agency, Washington, DC (Federal Guidance Report No. 12, EPA 402-R-93-081).

References

- Environmental Laboratory (1987), *U.S. Army Corps of Engineers Wetlands Delineation Manual*, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi (Technical Report Y-87-1).
- Ferry, L., T. Berry, and D. MacQueen (1998), *Post-Closure Plan for the Pit 6 Landfill Operable Unit Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-128638).
- Folks, K. (1997), *LLNL Report of Waste Discharge for Beneficial Reuse of Soil at the Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126943).
- Gallegos, G. M. (1991), *Assessment of Sediment Monitoring at LLNL*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-121236).
- Gallegos, G. M. (1993), "Surveillance Monitoring of Soils for Radioactivity: Lawrence Livermore National Laboratory 1976 to 1992," *Health Physics* **69**(4), 487–493.
- Gallegos, G. M. (1998), *NESHAPs Annual Report Guidance Document*, Lawrence Livermore National Laboratory, Operations and Regulatory Affairs Division, Livermore, CA (EMP-NS-S).
- Gallegos, G. M., and A. H. Biermann (1997), *LLNL NESHAPs 1996 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-97).
- Gallegos, G. M., A. H. Biermann, R. J. Harrach, N. A. Bertoldo, L. C. Hall, R. L. Berger, and K. A. Surano (1998), *LLNL NESHAPs 1997 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-98).
- Gallegos, G. M., B. K. Balke, K. A. Surano, W. G. Hoppe, P. J. Tate, J. C. Steenhoven, B. C. Fields, L. M. Garcia, K. C. Lamson (1992), *Environmental Report 1991*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-91).
- Gallegos, G. M., R. J. Harrach, A. H. Biermann, F. J. Gouveia, P. J. Tate, B. C. Fields, and K. Surano (1996), *LLNL NESHAPs 1995 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-96).
- Gallegos, G. M., D. MacQueen, K. Surano (1999), *Livermore Big Trees Park: 1998 Summary Results*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-134581).

- Gallegos, G. M., P. J. Tate, B. K. Balke, E. Christofferson, R. J. Harrach, W. G. Hoppes, R. A. Failor, S. Wander, B. C. Fields, L. M. Garcia, and A. R. Grayson (1994), *Environmental Report for 1993*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-93).
- Galles, H. L., to S. Timm (1997), Letter re: Statistically Significant Evidence for a Release of Barium at Pit 7 Under Waste Discharge Requirements (WDR) Order 93-100, Lawrence Livermore National Laboratory, Livermore, CA (WGMG97-249, July 10, 1997).
- Galles, H. L., to J. Cho (1997), Letter re: Lawrence Livermore National Laboratory Drainage Retention Basin Monitoring Plan Amendment (WGMG97-439, December 9, 1997)
- Galles, H. L., to S. Timm (1998a), Letter re: Statistically Significant Evidence for a Release of Uranium from Lawrence Livermore National Laboratory Experimental Test Site (Site 300) Pit 7 (WGMG98-306, November 10, 1998).
- Galles, H. L., to S. Timm (1998b), Letter re: Statistically Significant Evidence for a Release of 1-2 Dichloroethane from Lawrence Livermore National Laboratory Experimental Test Site (Site 300) Pit 6 (WGMG98-282, October 13, 1998).
- Galles, H. L., to S. Timm (1999), Letter re: Statistically Significant Evidence for a Release of Tritium from Lawrence Livermore National Laboratory Experimental Test Site (Site 300) Pit 1 (WGMG99-006, January 14, 1999).
- Golder Construction Services, Inc. (1998), *Construction Quality Assurance for the RCRA Closure of the High Explosives Open Burn Treatment Facility*, Lawrence Livermore National Laboratory Site 300, Livermore, CA, September 9, 1998 (UCRL-CR-131701).
- Gouveia, F., and K. R. Chapman (1989), *Climatology of Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCID-21686).
- Grandfield, C. H. (1989), *Guidelines for Discharges to the Sanitary-Sewer System*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10235).
- Greenberg, A. E., L. S. Clesceri, A. D. Eaton, eds. (1992), *Standard Methods for the Examination of Water and Wastewater*, American Public Health Association, Baltimore, Maryland.

References

- Gudiksen, P. H., C. L. Lindeken, C. Gatrousis, and L. R. Anspaugh (1972), *Environmental Levels of Radioactivity in the Vicinity of the Lawrence Livermore Laboratory, January through December 1971*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-51242).
- Gudiksen, P. H., C. L. Lindeken, J. W. Meadows, and K. O. Hamby (1973), *Environmental Levels of Radioactivity in the Vicinity of the Lawrence Livermore Laboratory, 1972 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-51333).
- Gupta, S. K., C. R. Cole, C. T. Kincaid, and A. M. Monti (1987), *Coupled Fluid, Energy, and Solute Transport (CFEST) Model: Formulation and User's Manual*, Office of Nuclear Waste, Battelle Memorial Institute, Columbus, OH (Report BMI/ONWI-660).
- Hall, H. L., and W. L. Edwards (1994a), *Radiation Analytical Sciences Quality Assurance Plan, Quality Implementing Procedures and Quality Assurance Project Plans*, Vol. 1, Lawrence Livermore National Laboratory, Livermore, CA (M-078-142).
- Hall, H. L., and W. L. Edwards (1994b), *Radiation Analytical Sciences Integrated Software Documentation*, Vols. 2a, 2b, and 3, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-116560).
- Hall, H. L., and W. L. Edwards (1994c), *Technical Implementing Procedures, Radiation Analytical Sciences*, Vol. 2a, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-116560).
- Harrach, R. J. (1998), *Guidance for Radiological Dose Assessment, Operations and Regulatory Affairs Division*, Lawrence Livermore National Laboratory, Livermore, CA (EMP-R-DA).
- Harrach, R. J., K. A. Surano, A. H. Biermann, F. J. Gouveia, B. C. Fields, and P. J. Tate, (1994), *LLNL NESHPs 1993 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-94).
- Harrach, R. J., R. A. Failor, G. M. Gallegos, P. J. Tate, E. Christofferson, E. R. Brandstetter, J. M. Larson, A. H. Biermann, R. A. Brown, B. C. Fields, L. M. Garcia, and A. R. Grayson (1996), *Environmental Report 1995*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-95), <http://www.llnl.gov/saer/>.

References

- Harrach, R. J., G. M. Gallegos, P. J. Tate, E. Christofferson, E. R. Brandstetter, J. M. Larson, A. H. Biermann, B. C. Fields, L. M. Garcia, and K. A Surano (1997), *Environmental Report 1996*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-96), <http://www.llnl.gov/saer/>.
- Harrach, R. J., J. M. Larson, G. M. Gallegos, E. Christofferson, E. R. Brandstetter, P. J. Tate, A. H. Biermann, B. C. Fields, L. M. Garcia, and P. Althouse (1998), *Environmental Report 1997*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-97), <http://www.llnl.gov/saer/>.
- Heffner, B. (1998), *Third Site 300 Environmental Restoration Fact Sheet*, Lawrence Livermore National Laboratory, Livermore, CA.
- Hoffman, F., and D. Bishop (1998), Letter Report: LLNL Report of Preliminary Results to David Lunn of Alameda County Flood Control and Water Conservation District, Zone 7, February 27, 1998, presenting an evaluation of hydrogeology of the Mocho I and Spring sub-basins, based on LLNL hydrogeological investigations.
- Hoffman, J., M. Maley, B. Qualheim, R. Bainer, E. Folsom, and M. Dresen (1998), *LLNL Ground Water Project 1997 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126020-97).
- Homann, S. G. (1994), *HOTSPOT Health Physics Codes for the PC*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-10615).
- Huey, A. S. (1948), "Geology of the Tesla Quadrangle, California," *California Division of Mines and Geology*, Bulletin 140.
- International Commission on Radiological Protection (ICRP) (1959), *Recommendations of the International Commission on Radiological Protection, Report of Committee 2 on Permissible Dose of Internal Radiation*, Publication 2, Pergamon Press, New York, NY.
- International Commission on Radiological Protection (ICRP) (1977), *Recommendations of the International Commission on Radiological Protection*, Publication 26 (Pergamon Press, New York, NY).
- International Commission on Radiological Protection (ICRP) (1980), *Limits for Intakes of Radionuclides by Workers*, Publication 30, Pergamon Press, New York, NY.

References

- International Committee on Radiation Protection (ICRP) (1994). *Dose Coefficients for Intakes of Radionuclides by Workers*. Publication 68, Vol. 24, No. 4, Pergamon Press, Oxford.
- International Committee on Radiation Protection ICRP (1996). “Compilation of Ingestion and Inhalation Dose Coefficients.” In *Age-dependent Doses to Members of the Public from Intake of Radionuclides: Part 5*. Annals of the ICRP Vol. 26 No. 1. ICRP No. 72 ISSN 0146-6453, Pergamon Press, Oxford.
- Isherwood, W. F., C. H. Hall, M. D. Dresen, and A. J. Boegel (1991), *CERCLA Feasibility Study Report for the LLNL Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-104040).
- Jakub, B. (1998), Action Memorandum for the Building 815 Operable Unit Removal Action at Lawrence Livermore National Laboratory Site 300, August 1998.
- Lamarre, A. L., ed. (1989a), *LLNL Site 300 Environmental Investigations Quarterly, July–September 1989*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10194-89-3).
- Lamarre, A. L., ed. (1989b), *LLNL Site 300 Environmental Investigations Quarterly, October–December 1989*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10194-89-4).
- Lamarre, A. L. (1989c), *Lawrence Livermore National Laboratory Site 300 Environmental Restoration Work Plan*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10247 Rev. 1).
- Lamarre, A. L. (1998a), *Fourth Quarter 1997 Compliance Report for the Eastern and Central GSA Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, January 30, 1998.
- Lamarre, A. L. (1998b), *First Quarter 1998 Compliance Report for the Eastern and Central GSA Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, April 30, 1998.
- Lamarre, A. L. (1998c), *Second Quarter 1998 Compliance Report for the Eastern and Central GSA Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, August 30, 1998.

References

- Lamarre, A. L. (1998d), *Third Quarter 1998 Compliance Report for the Eastern and Central GSA Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, October 30, 1998.
- Lamarre, A. L. (1998e), *Fourth Quarter 1997 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, March 30, 1998.
- Lamarre, A. L. (1998f), *First Quarter 1998 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, June 30, 1998.
- Lamarre, A. L. (1998g), *Second Quarter 1998 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, September 30, 1998.
- Lamarre, A. L. (1998h), *Third Quarter 1998 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, December 28, 1998.
- Lamarre, A. L., and M. J. Taffet (1989), *Firing Table Gravel Cleanup at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10282).
- Lawrence Livermore National Laboratory (1996a), *The Environmental, Safety, and Health Program at Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-119618 Rev 1). Accessible from LLNL home page at <http://www.llnl.gov/>.
- Lawrence Livermore National Laboratory (1996b), *Environmental Compliance Manual*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-118090 Rev 2).
- Limnion Corporation, The (1991), *Drainage Retention Basin Management Plan*, Lawrence Livermore National Laboratory, Livermore, CA.
- Lindken, C. L., R. O. Morgen, and K. F. Petrock (1963), "Collection Efficiency of Whatman-41 Filter Paper for Submicron Aerosols," *Health Physics* **9**, 305–308.

References

- Lindeken, C. L., P. H. Gudiksen, J. W. Meadows, K. O. Hamby, and L. R. Anspaugh (1973), *Environmental Levels of Radioactivity in Livermore Valley Soils*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-74424).
- Littlejohn, J., and A. L. Lamarre (1997), Letter Report: LLNL Livermore Site December 10, 1996 Remedial Program Manager's Meeting Summary and Fourth Quarter Self-Monitoring Report, dated February 27, 1997.
- Longley, K. E., H. V. Johns, and H. Abraham (1994), *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region*, Central Valley Regional Water Control Board, Sacramento, CA.
- Lowder, W. M., and H. L. Beck (1966), "Cosmic Ray Ionization in the Lower Atmosphere," *J. Geophys. Res.* **71**, 4661–4668.
- MacQueen, D. H. (1995), *Livermore Big Trees Park January 1995 Soil Survey Results*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-121045).
- Marshack, J. B. (1991), *The Designated Level Methodology for Waste Classification and Cleanup Level Determination*, a summary of the Staff Report of the Central Valley RWQCB.
- Marshack, J. B. (1998), *A Compilation of Water Quality Goals*, Central Valley Regional Water Quality Control Board, Sacramento, CA.
- Marshall, M. and D. C. Stevens (1980), "The Purposes, Methods and Accuracy of Sampling for Airborne Particulate Radioactive Materials," *Health Physics* **39**, September 1980, Pergamon Press Ltd., pp. 409-423.
- Mathews, S., and R. A. Brown (1998), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, First Quarter 1998*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-98-1).
- Mathews, S., and M. Taffet (1997), *Final Closure Plan for the High-Explosives Open Burn Facility at Lawrence Livermore National Laboratory Experimental Test Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-111753 Rev 1).

References

- National Council on Radiation Protection and Measurements (NCRP) (1987a), *Recommendations on Limits of Exposure to Ionizing Radiation*, Report No. 91, National Council on Radiation Protection and Measurements, Washington, DC.
- National Council on Radiation Protection and Measurements (NCRP) (1987b), *Ionizing Radiation Exposure of the Population of the United States*, Report No. 93, National Council on Radiation Protection and Measurements, Washington, DC.
- Oak Ridge Institute for Science and Education (1995), *Atmospheric Dispersion Modeling Resources*, Second Edition.
- Parks, B. F. (1999), "Tritium dose overestimates by CAP88-PC." In *Operational Radiation Safety*, Supplement to *Health Physics* 76, No. 2, February 1999.
- Parks, B. S. (1992), *User's Guide for CAP88-PC, Version 1.0*, U.S. Environmental Protection Agency, Office of Radiation Programs, Las Vegas, NV (EPA 402-B-92-001).
- Pendleton, B., A. Giron, B. A. Millsap, K. W. Cline, D. M. Bird, eds. (1987), *Raptor Management Techniques Manual*, National Wildlife Federation, Washington, DC.
- Peterson, W. B. and L. G. Lavdas (1986), "INPUFF 2.0—A Multiple Source Gaussian Puff Dispersion Algorithm," In *User's Guide*, U.S. Environmental Protection Agency, Research Triangle, NC.
- Raber, E., and D. W. Carpenter, eds. (1983), *An Evaluation of the Hydrogeology and Groundwater Chemistry Associated with Landfills at LLNL's Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-53416).
- Rogers/Pacific Corporation (1990), *Lawrence Livermore National Laboratory Site 300 Resource Conservation and Recovery Act Closure and Post-Closure Plans—Landfill Pits 1 and 7*, Vols. I and II, Van Nuys, CA (California EPA No. CA2890090002).
- San Francisco Bay Regional Water Quality Control Board (RWQCB) (1982a), *Water Quality Control Plan, San Francisco Bay Basin*, State of California, Oakland, CA.
- San Francisco Bay Regional Water Quality Control Board (RWQCB) (1982b), *Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for: U.S. Department of Energy and Lawrence Livermore National Laboratory*, State of California, Oakland, CA (Order No. 95-174, NPDES No. CA030023).

References

- San Francisco Bay Regional Water Quality Control Board (RWQCB) (1995), *Water Quality Control Plan, San Francisco Bay Basin*, State of California, Oakland, CA.
- San Francisco Bay Regional Water Quality Control Board (RWQCB) (1996), Letter from Loretta Barsamian and Richard McMurtry, RWQCB Executive Officer and Ground Water Protection and Waste Containment Division Chief, respectively, to Paul Ko, DOE Project Manager, stating that no further remedial action related to the fuel hydrocarbons is required, dated October 30, 1996.
- Schemnitz, S. D., ed. (1980), *Wildlife Management Techniques Manual*, The Wildlife Society, Washington, DC.
- Shleien, B., and M. S. Terpilak (1984), *The Health Physics and Radiological Health Handbook*, Nucleon Lectern Associates, Inc., Olney, MD.
- Silver, W. J., C. L. Lindeken, J. W. Meadows, W. H. Hutchin, and D. R. McIntyre (1974), *Environmental Levels of Radioactivity in the Vicinity of the Lawrence Livermore Laboratory, 1973 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-51547).
- Silver, W. J., C. L. Lindeken, J. W. Meadows, W. H. Hutchin, and D. R. McIntyre (1975), *Environmental Levels of Radioactivity in the Vicinity of the Lawrence Livermore Laboratory, 1974 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-74).
- Silver, W. J., C. L. Lindeken, K. M. Wong, E. H. Willes, and J. H. White (1978), *Environmental Monitoring at the Lawrence Livermore Laboratory, 1977 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-77).
- Silver, W. J., C. L. Lindeken, J. H. White, and R. W. Buddemeir (1980), *Environmental Modeling of Lawrence Livermore Laboratory: 1979 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-79).
- Stone, R., and M. R. Ruggieri (1983), *Ground-Water Quality and Movement at Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-53474).
- Struckmeyer, R. (1994), *NRC TLD Direct Radiation Monitoring Network, Progress Report, July–September, 1994*, Nuclear Regulatory Commission, Washington, DC (NUREG-0837, Vol. 14, No. 3).

References

- Surano, K. A., G. B. Hudson, R. A. Failor, J. M. Sims, R. C. Holland, S. C. MacLean, and J. C. Garrison (1991), "Helium-3 Mass Spectrometry for Low-Level Tritium Analysis of Environmental Samples," *J. Radioanal. Nucl. Chem.* **6**, 443–453.
- Surano, K. A., A. H. Biermann, R. J. Harrach, F. J. Gouveia, R. L. Berger, B. C. Fields, G. M. Gallegos, and P. J. Tate (1995), *LLNL NESHAPs 1994 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-95).
- Taffet, M. J., A. L. Lamarre, and W. A. McIlvride (1989a), *LLNL Site 300 Environmental Investigations Quarterly, January–March 1989*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10194-89-1).
- Taffet, M. J., J. A. Oberdorfer, and W. A. McIlvride (1989b), *Remedial Investigation and Feasibility Study for the Lawrence Livermore National Laboratory Site 300 Pit 7 Complex*, Lawrence Livermore National Laboratory, Livermore, CA (UCID-21685).
- Taffet, M. J., J. R. Copland, and R. A. Ferry (1991), *Draft Feasibility Study for Landfill Pit 6, Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-106307DR).
- Taffet, M. J., L. Green-Horner, L. C. Hall, T. M. Carlsen, and J. A. Oberdorfer (1996), *Addendum to Site-Wide Remedial Investigation Report, Building 850/Pit 7 Complex Operable Unit, Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-108131, Add. 1).
- Tate, P., S. Brigdon, G. Gallegos, B. Balke, A. Biermann, F. Gouveia, L. Garcia, D. MacQueen, N. Hankla, S. Mathews, E. Christofferson, R. Brown, E. Brandstetter, R. Harrach, A. Grayson, B. Fields, J. Larson, R. Vellinger, R. Failor, K. Surano, W. Hoppes, P. Althouse, and B. Ward (1995), *Environmental Monitoring Plan*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-106132 Rev. 1).
- Thorpe, R. K., W. F. Isherwood, M. D. Dresen, and C. P. Webster-Scholten (1990), *CERCLA Remedial Investigation Report for the LLNL Livermore Site*, Vols. 1–5, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10299).
- Tompson, A. F. B., P. F. McKereghan, and E. M. Nichols, eds. (1995), *Preliminary Simulation of Contaminant Migration in Ground Water at the Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-115991).

References

- Toy, A. J., C. L. Lindeken, K. S. Griggs, and R. W. Buddemeier (1981), *Environmental Monitoring at the Lawrence Livermore National Laboratory, 1980 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-80).
- U.S. Department of Energy (1988), *External Dose-Rate Conversion Factors for Calculation of Dose to the Public*, U.S. Department of Energy, Washington, DC (DOE/EH-0070).
- U.S. Department of Energy (1991), *Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance*, U.S. Department of Energy, Washington, DC (DOE/EH-0173T).
- U.S. Department of Energy (1994), *Annual Report of Waste Generation and Pollution Prevention Progress 1993*, Washington, DC.
- U.S. Department of Energy (1996a), *Annual Report of Waste Generation and Pollution Prevention Progress 1994*, Washington, DC (Report No. DOE/EM-0310).
- U.S. Department of Energy Office of the Secretary (1996b), *Pollution Prevention Program Plan, 1996*, U.S. Department of Energy, Washington, DC (DOE/S-0118).
- U.S. Department of Energy, Assistant Secretary for Environmental Management (1997), *Annual Report of Waste Generation and Pollution Prevention Progress 1995*, Washington, DC (Report No. DOE/EM-0323).
- U.S. Department of Energy (1998), *Annual Report on Waste Generation and Pollution Prevention Progress*, U.S. Department of Energy, Washington, DC.
- U.S. Department of Energy (1998a), *Agreement to Revise Schedules Contained in the Lawrence Livermore National Laboratory Site 300 Federal Facility Agreement*, Appendix A, U.S. Department of Energy, October 1998.
- U.S. Department of Energy (1998b), *August 1998 Quarterly Report Regarding the National Ignition Facility*, Oakland Operations Office, Oakland CA, August 25, 1998.
- U.S. Department of Energy (1998c), "Department of Energy Directives Web Site," <http://www.explorer.doe.gov:1776/htmls/directives.html>.
- U.S. Department of Energy (1998d), *Annual Report of Waste Generation and Pollution Prevention Progress 1997*, Albuquerque, NM (Report No. DOE/EM-0365).

References

- U.S. Department of Energy (1998e), *Proposed Regulatory Pathway for the Building 854 Operable Unit*, Lawrence Livermore National Laboratory Site 300, Livermore, CA, May 28, 1998.
- U.S. Department of Energy (1999), *Annual Report of Waste Generation and Pollution Prevention Progress 1998*, Washington, DC.
- U.S. Department of Energy and Lawrence Livermore National Laboratory (LLNL) (1998), *Livermore Big Trees Park 1998 Soil Sampling Plan*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-130551).
- U.S. Department of Energy and University of California (1992a), *Final Environmental Impact Statement and Environmental Impact Report for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore*, Lawrence Livermore National Laboratory, Livermore, CA (DOE/EIS-0157, SCH90030847).
- U.S. Department of Energy and University of California (1992b), *Final Environmental Impact Statement and Environmental Impact Report Executive Summary*, Lawrence Livermore National Laboratory, Livermore, CA (DOE/EIS-0157).
- U.S. Department of Health and Human Services (1999), Health Consultation: "Plutonium Contamination in Big Trees Park," Lawrence Livermore National Laboratory, Public Service, Agency for Toxic Substances and Disease Registry, CERCLIS No. CA28900125584, pp. 7-8.
- U.S. Environmental Protection Agency (1987), *Data Quality Objectives for Remedial Response Activities: Development Process*, U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC (EPA 540/G-87/003, OSWER Directive 9355-0).
- U.S. Environmental Protection Agency (1991), *Risk Assessment Guidance for Superfund: Volume I—Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals)*, U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC.
- U.S. Environmental Protection Agency (1993), *Supplement B to the Guideline on Air Quality Models (Revised)*, EPA Report No. EPA-450/2-78-027R (Supplement B).

References

- U.S. Nuclear Regulatory Commission (1977), *Calculation of Annual Doses to Man from Routine Releases of Reactor Effluent for the Purpose of Evaluation Compliance with 10 Code of Federal Regulations, Part 50, Appendix 1*, Washington, DC (Regulatory Guide 1.109).
- Vogele, T. J., P. F. McKereghan, R. Gelinas, and A. F. B. Tompson (1996), Technical Note: *Preliminary 3D Simulations of Contaminant Migration in and Removal from Ground Water at the LLNL's Livermore Site, Summary of First Interim Results, TFA Area*, Lawrence Livermore National Laboratory, Livermore, CA (MI-ERD/LS/3DIR:1).
- Webster-Scholten, C. P., and C. H. Hall (1988), *Work Plan, Lawrence Livermore National Laboratory, Livermore Site: CERCLA/SARA Remedial Investigations/ Feasibility Studies*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10225).
- Webster-Scholten, C. P., ed. (1994), *Final Site-Wide Remedial Investigation Report, Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-108131).
- Wilson, K. L. (1999), *Assessing the Nonhazardous Solid Waste Stream at Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-134220).
- Wood, J., R. Michalik, and K. Doiron (1999), *Radioactive Waste Storage Facility and Tank System Design Criteria Standards*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-133355 Rev 1).
- Ziagos, J., and E. Reber-Cox (1998a), *Building 815 Removal Action Design Workplan for the High Explosives Process Area Operable Unit at Lawrence Livermore National Laboratory Site 300*, Livermore California, November 17, 1998.
- Ziagos, J., and E. Reber-Cox (1998b), *Ground Water Tritium Plume Characterization Summary Report for the Building 850/Pits 3 and 5 Operable Unit, Lawrence Livermore National Laboratory Site 300*, Livermore California, October 30, 1998.
- Ziagos, J., and E. Reber-Cox (1998c), *Characterization Summary Report for the Building 854 Operable Unit*, Lawrence Livermore National Laboratory, Livermore California.